



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D2622-120C
Job Sheet 202547



163 5243427

Part No: D2622-120C

Part Name: Step Extrusion

Job Qty: 160 pcs

Status: New

Priority: Medium

Part Weight: 0 lbs

Job Created: 10/30/19

Due Date: 11/21/19

Type: Stock

Note: DWG REV C1

Ship Via:

Job Tracking No:

Created By: Marie Lajeunesse

Description:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing <i>Signature</i>	160 pcs		11/21/19	0.00	0.00	Purchasing - 1		DEC 23 2019
							Purchasing - 2		
							Purchasing - 3		
110	Packaging 2-1 - Receive - B4B	160 pcs		11/21/19	0.00	0.00	Packaging 2 - 1 - B4B		
							Packaging 2 - 2 - B4B		DEC 23 2019
							Packaging 2 - 3 - B4B		
							Packaging 2 - 5 - B4B		
							Packaging 2 - 4 - B4B		
							Packaging 2 - 6 - B4B		
							Packaging 2 - 7 - B4B		
							Packaging 2 - 8 - B4B		
							Packaging 2 - 9 - B4B		
							Packaging 2 - 10 - B4B		
							Packaging 2 - 11 - B4B		
							Packaging 2 - 12 - B4B		
							Packaging 2 - 13 - B4B		
							Packaging 2 - 14 - B4B		
							Packaging 2 - 15 - B4B		
							Packaging 2 - 16 - B4B		
							Packaging 2 - 17 - B4B		
							Packaging 2 - 18 - B4B		
							Packaging 2 - 19 - B4B		
							Packaging 2 - 20 -		

DAS
81
9-89

DAS
82
9-89

DAS
82
9-89

DAS
81
9-89

						B4B	
						Packaging 2 - 21 - B4B	
						Packaging 2 - 22 - B4B	
						Packaging 2 - 23 - B4B	
						Packaging 2 - 24 - B4B	
						Packaging 2 - 25 - B4B	
						Packaging 2 - 26 - B4B	
						Packaging 2 - 27 - B4B	
						Packaging 2 - 28 - B4B	
						Packaging 2 - 29 - B4B	
						Packaging 2 - 30 - B4B	
						Packaging 2 - 31 - B4B	
						Packaging 2 - 32 - B4B	
						Packaging 2 - 33 - B4B	
						Packaging 2 - 34 - B4B	
						Packaging 2 - 35 - B4B	
						Packaging 2 - 36 - B4B	
120 QC 18	160 pcs	11/21/19	0.00	0.00		QC 18 - 12	
						QC 18 - 14	
						QC 18 - 22	
						QC 18 - 25	
						QC 18 - 48	
						QC 18 - 58	
						QC 18 - 61	
						QC 18 - 9	
						QC 18 - 81	
130 Packaging 3-1 - Stock - B4B	160 pcs	11/21/19	0.00	0.00			DEC 23 2019
						Packaging 3 - 1 - B4B	
						Packaging 3 - 2 - B4B	
						Packaging 3 - 3 - B4B	
						Packaging 3 - 4 - B4B	
						Packaging 3 - 5 - B4B	
						Packaging 3 - 6 - B4B	
						Packaging 3 - 7 - B4B	
						Packaging 3 - 8 - B4B	
						Packaging 3 - 9 - B4B	
						Packaging 3 - 10 - B4B	
						Packaging 3 - 11 - B4B	
						Packaging 3 - 12 - B4B	
						Packaging 3 - 13 - B4B	
						Packaging 3 - 14 - B4B	
Packaging 3 - 15 - B4B							
						Plex 10/30/19 10:52 AM Dart.lajeunesse.marie	

DEC 2 3 2019

DAS
81
9-89
DAS
82
9-89

				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	Stu
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
140 QC 21 - SA	160 pcs	11/21/19	0.00 0.00	QC 21 - SA - 21	DAS
				QC 21 - SA - 70	DEC 24 2019 70
				QC 21 - SA - 53	9-89
Part Op 100 - Purchasing - Issue P/O: _____ a) Extrude as per Dwg D2622 Rev. C f) Order at 120" longg) Bon L Descriptions: Canada Inc. 110 - Receive & Inspect for Damage & Mat'l Certs - Ensure material certification is attached 120 - QC18 In-Coming Inspection Material - Check Pull test per Dwg D2622 for compliance page attached Check hardness with Webster tester 130 - Identify as per dwg & Stock Location: _____ LOCATION : HALL 140 - QC21- Final Inspection - Work Order Release					
Job BOM					
Part / Item	Component Name	Quantity	Operation	Container	
D2622-120CP	Extrusion	160 pcs (1 ea)	100-Purchasing	S243424	
Job Allocations					
Operation	Component Part	Required	Inventory	Allocated	
100-Purchasing	D2622-120CP	160	0	0	

Part Specifications
Specifications could not be found.

Plex 10/30/19 10:52 AM Dart.lajeunesse.marie

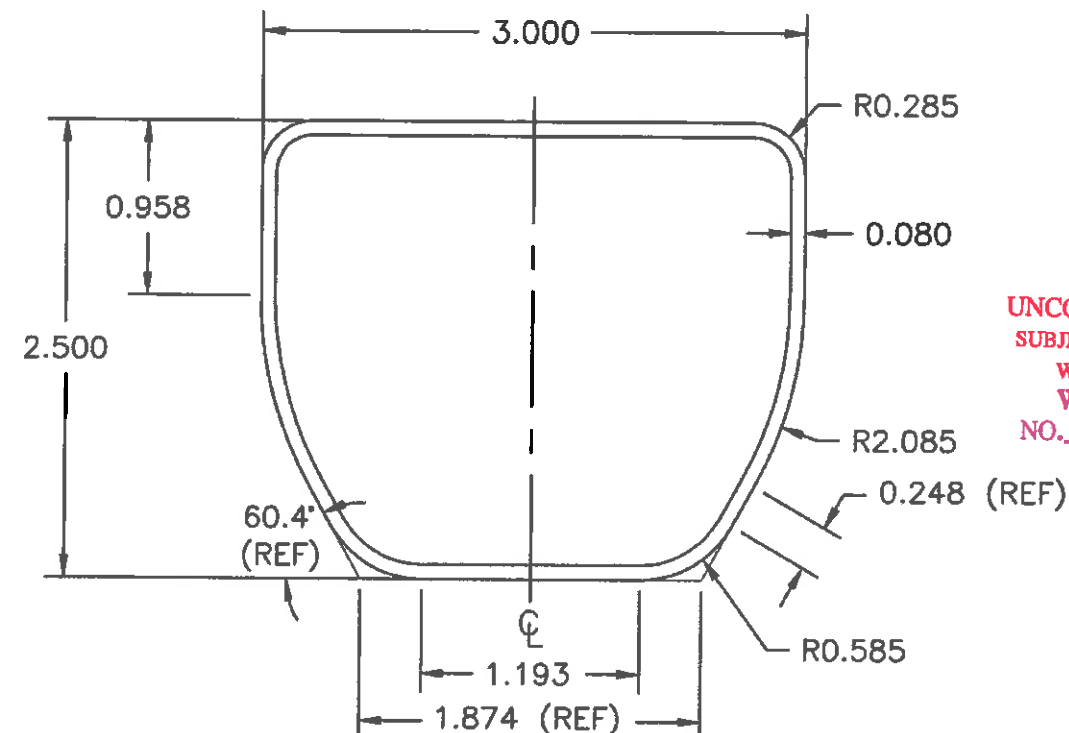
LIME 1

D2622-120C



DESIGN	KE	DRAWN BY	GP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	#	APPROVED	#	DRAWING NO. D2622	REV. C SHEET 1 OF 1
DATE	02.09.11			TITLE STEP EXTRUSION	SCALE 1:1
A	96.11.29	NEW ISSUE			
B	97.12.12	CHANGE MATERIAL, ADD TOL. QSI			
C	02.09.11	0.080 WAS 0.085; ADD PART & DIE No.			
C1	GP 02.10.04	ADD 'REV. A' TO DIE NUMBER.			

RELEASED
02.09.11



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 202547
191030

D2622-XXX STEP EXTRUSION

- 1) PART NUMBER IS D2622-XXX WHERE 'XXX' IS CUT LENGTH IN INCHES (EG. D2622-120 IS 120" LONG)
- 2) MATERIAL 6061-T6 (QQ-A-200/8)
- 3) MANUFACTURED USING BON-L DIE # 897123 Rev. A

- 4) A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY TO ENSURE THAT THE BATCH MEETS THE MINIMUM MECHANICAL PROPERTIES STATED BELOW:

MINIMUM TENSILE YIELD STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
MINIMUM ELONGATION = 8%

- 5) PART IS SYMMETRIC ABOUT CENTERLINE
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 7) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

DAS
82
9-89

DEC 23 2019

Copyright © 2002 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER
POHB044949



Supplier: SIG001-VC
Signature Aluminum Canada Inc.
C/O/ T10322C
PO Box 4488, STN A
TORONTO
ON
M5W 4H1 Canada
Phone: 905-427-6550
Fax: 905-427-2246

PO No: POHB044949
PO Date: 10/30/19
Due Date: 12/20/19
Purchase Order Revision:
Revision Date:
Ship-To Contact: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items													
Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	202547	D2622-120CP	D2962 Rev C		Extrusion : EXTRUDE AS PER DWG D2622-120 REV. C DIE # DAA- 897123 LENGHT 120" EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF TUBE MATERIAL MUST BE SMOOTH AND FREE FROM DEFECT SCRATCHES,NICKS,DENTS	Firmed	-	12/20/19	163 pcs	0 pcs	163 pcs	\$25.2487/pcs	\$4,115.54
2	202743	D2423P	D2423 Rev B1		Lug Extrusion : AS PER DWG D2423 REV. B (EXTRUSION CUT AT 8 FT LONG) die # DAA-5-2 EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE OUTSIDE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES,NICKS,OR DENTS	Firmed	-	12/20/19	280 ft	0 ft	280 ft	\$10.3178/ft	\$2,888.98
Grand Total:												\$7,004.52	

	Dart Aerospace Ltd. 1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada Tel (613) 632-5200	PURCHASE ORDER POHB044949 
Order Notes		
Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.		
Procurement Quality Clauses A005 RIGHT OF ENTRY A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER) A012 CHEMICAL AND PHYSICAL TEST REPORTS A016 PERSONNEL QUALIFICATION A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE) A026 CERTIFICATION OF MATERIAL CONFORMANCE A041 QUALITY MANAGEMENT SYSTEM A042 DART NOTIFICATION BY SUPPLIER A043 RETENTION OF QUALITY DOCUMENT A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM A049 SUPPLIER AWARENESS		

Plex 12/23/19 2:41 PM dart.lussier,patrick



ACCT# 46024

1850 Clements Road, Pickering Ontario, Canada L1W 3R8

Phone: (866) 587-5780 Fax: (905) 427-2207

Visit us at www.signaturealuminum.com

INVOICING AND COMPANY LOCATION

SIGNATURE ALUMINUM CANADA
1850 CLEMENTS ROAD
PICKERING ON L1W 3R8

PACKING LIST

PACKING LIST DATE / DATE DU BODEREAU

12-17-19

PACKING LIST NUMBER / N° DE BODEREAU

046141

SALES ORDER NUMBER / N° DE COM

138199

REFER TO

ALL CORRESPONDANCE

REFEREZ-VOUS A CES

NUMEROUS POUR TOUTE

CORRESPONDANCE

TERMS / FREIGHT
PP

SHIP TO / EXPÉDIÉ A DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA PHONE: 613-632-5200		SOLD TO / VENDUE A DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA PHONE: 613-632-5200	
--	--	---	--

CUSTOMER ID / ID DU CLIENT	ORDER DATE / DE LA COM	CUSTOMER PO NUMBER / CLIENT PO Number
46024	11/01/19	POH044949
BILL OF LADING NUMBER / NO. DE CONNAISSEMENT 046141		

LOCATION	TRAILER NUMBER / REMORQUE Nombre	SALESMAN / VENDEUR	CREDIT REP / REP DU CRÉDIT	SALES REP / REP DES VENTES
PIC	T35	042		GATTENBOROU
JOB / FICHER	CARRIER / TRANSPORTEUR RSBYFORD		FIELD SALES REP / REP REGIONAL DES VENTES	CUST SERVICE REP / REP. SERVICE CLIENTELE
			GATTENBOROU	D1K

ITEM NO. / NUMERO	ORIGINAL ORDER QUANTITY / Quantite d'ordre ORIGINAL	UNIT / UNITE	PREVIOUS SHIPPED QUANTITY / PRECEDENT Quantite livree	MFG. PART NUMBER / MFG. PARTIE NUMERO	CUSTOMER PART NUMBER / NUMERO DE REFERENCE DU CLIENT	ALLOY & TEMPER / ALLIAGE & TEMPER	LENGTH / LONGUEUR	CUTTING TOLERANCE / Tolerance de coupe	FINISH DESCRIPTION / DESCRIPTION DE FINITION	FABRICATION DESCRIPTION / DESCRIPTION DE FABRICATION	SHIPPING TOLERANCE / EXPEDITION TOLERANCE	NBR OF PKGS / NBR DE PKGS	GROSS LBS / LIVRES BRUT	NET QUANTITY / QUANTITE NETTE	UNIT / UNITE	QUANTITY DUE / Quantite en raison
-------------------	---	--------------	---	---------------------------------------	--	-----------------------------------	-------------------	--	--	--	---	---------------------------	-------------------------	-------------------------------	--------------	-----------------------------------

001	1,459	LB		DAA-897123-2		6061 T6						4	1,512	1,451	LB	
	662	KG		D2622-120CP		120.0000 IN							686	658	KG	
Y	160	PC												164	PC	

Cut (+): 0.1180
Cut (-): 0.0000

Min: -10 %

Max: 10 %

				929199 / 526656	1	452	437	49	PC
				929199 / 526660	1	452	437	49	PC
				929199 / 526673	1	452	437	49	PC
				929199 / 526678	1	157	141	17	PC

Transportation/Traffic damages and/or shortage claims are to be noted on the delivery copy of sellers shipping packing lists and signed and dated below by customers authorized representatives. No return materials will be accepted for credit without permission. The articles and/or services covered by this shipping packing list were produced in accordance with the fair labor standards act of 1938 as amended. Order accepted subject to the terms and conditions stated on our website.

	Continued
TOTALS	

ACKNOWLEDGEMENT OF GOODS DELIVERED AND CONDITION

CUSTOMER

DATE OF DELIVERY

DRIVER



SIGNATURE ALUMINUM CANADA

1850 CLEMENTS RD
PICKERING, ON L1W 3R8

CERTIFICATE OF COMPLIANCE

Cert Date	Cert No	Sales Order	Page
12/06/2019	5559960	138199	1
Cust PO	B/L No	Lot	Date
POHB044949	046141	929199	12/17/19

Sold To	Ship To
46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA	46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA

Item No	Part No	Item Description	Cust Part
001	DAA-897123-2	10FT MILL 6061 T6	D2622-120CP
Gross Weight	1,512 LBS		
Net Qty	1,451 LBS	164 PCS	4 PKGS
Specification		Die Desc	
AMS-QQ-A-200/8 & ASTM B221-08		DAS 82 9-89 DEC 2 3 2019	

Mechanical Tests:

Tensile	Yield			
MPA / KSI	MPA / KSI	% Elongation	Conductivity	HRE
324.9 / 47.1	271.8 / 39.4	9.6	N/A	91

Chemical Analysis:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	V	Zr
0.67	0.33	0.20	0.06	0.91	0.07	0.09	0.02	0.01	0.00

This Material is Made in Canada

This Material is RoHS Compliant

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgement form. No other warranties are applicable.

S. Gooder
Quality Manager
Signature Aluminum Canada Inc

ISO 9001/TS16949 Registered Company

Visit us at www.signaturealum.com

Rev A

LINE 1

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: D2622-120C
DATE: DEC 23 2019

PO / BATCH NO.: P04B044949
S243424

MATERIAL CERT REC'D: YES
QUANTITY RECEIVED: 163
QUANTITY INSPECTED: 163
QUANTITY REJECTED: —

THICKNESS ORDERED: .080
THICKNESS RECEIVED: .080
SHEET SIZE ORDERED: 120"
SHEET SIZE RECEIVED: 120"

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	☒ N	
CORRECT FINISH	☒ Y	N	
CORROSION	Y	☒ N	
CORRECT GRAIN DIRECTION	☒ Y	N	
CORRECT MATERIAL PER M-DRAWING	☒ Y	N	ASTM B221
CORRECT THICKNESS	☒ Y	N	
PHOTO REQUIRED	Y	☒ N	
CORRECT REF # TO LINK CERT	☒ Y	N	HIC 929199
CORRECT MATERIAL IDENTIFICATION	☒ Y	N	
CORRECT M# ON THE MATERIAL	☒ Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	☒ N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	☒ N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY:	<u>82</u> <u>9-89</u>	SIGNED OFF BY:	
DATE:	<u>DEC 23 2019</u>	DATE:	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



NCR No. _____

Job: _____ Part No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐		DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Eng. (Non-AW) ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Large Fab ☐ Finishing ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QS1042)			
Description Work Order Deviation				Disposition			
Root Cause Operator Manufacturing Process Equip/Tooling Handling/Preservation Material Product Improvement Process Improvement Human Factors							